MICROWAVE ASSISTED ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS EPA 3051 REVISION 0 1994					
Facility Name:	VELAP ID				
Assessor Name:Analyst Name:	Inspection Date				
Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date Analyst:					
Sample ID: Date of Sample Prepare	ation:	Date of Analysis:			
Did the microwave have a minimum of 574 watts?	4.1.1				
Was the microwave programmable to \pm 10 watts of the required power?	4.1.1				
Were the digestion vessels composed of fluorocarbon (PFA or TFM)?	4.1.4				
Were the digestion vessels capable of withstanding 7.5 \pm 0.7 atm/110 \pm 10 psi and capable of controlled pressure relief when those pressures were exceeded?	4.1.4 4.1.5				
Was the speed of the turntable used a minimum of 3 rpm?	4.1.5				
Was the microwave corrosion resistant for safety?	4.1.2, 4.1.5				
Were method blanks less than MDLs?	5.1.1				
Were sample containers prewashed with detergents, acids, and reagent water?	6.2				
Were sample containers glass or plastic?	6.2				
Were samples refrigerated upon receipt and analyzed as soon as possible?	6.3				
If the microwave did not use temperature feedback control capable of replicating the performance specifications of the method, was it calibrated?	7.1				
Was the microwave calibrated by measuring the temperature rise of 1 kg of water exposed to microwave radiation for a fixed period of time?	7.1.1				
Were three calibration points used when linear circuits were utilized?	7.1.1				
When linear circuits were not used, were multiple point calibrations used?	7.1.2				
Were the initial temperatures of the calibration water aliquots $23 \pm 2^{\circ}$ C measured to $\pm 0.05^{\circ}$ C with each repitition?	7.1.4				
Notes/Comments:					

MICROWAVE ASSISTED ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS **EPA 3051 REVISION 0 1994** Ν N/A **Comments** Relevant Aspect of Standards Method Reference Were calibration water aliquots microwaved at various 7.1.4 power settings for 2 minutes? Were calibration water aliquots vigorously stirred after removal from the microwave and the maximum 7.1.4 temperatures measured within 30 seconds to ±0.05°C? 7.1.3 Were calibrations periodically verified? Were all digestion vessels washed with acid and 7.2 reagent water? Were digestion vessels weighed to 0.001 g prior to 7.3.1 used? Were well mixed sample aliquots weighed into the 7.3.2 digestion vessels to the nearest 0.001 g? Were 10 mL aliquots of concentrated nitric acid added to the sample aliquots, and the vessels weighed to 7.3.3 the nearest 0.001 g again? Were samples microwaved for 10 minutes? 7.3.4 Were samples weighed after microwaving? 7.3.5 Were samples whose weights had decreased by 7.3.5 more than 10 percent during microwaving discarded? Were the dilutants used to dilute digested samples 7.3.7 matched to the matrices of the standards? Were duplicate samples and matrix spikes analyzed 8.2 with each batch of 20 or fewer? 8.3 Were duplicates and matrix spikes carried through all 8.2 steps of sample preparation? 8.3

METHOD 3051
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